

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018972**Date Inspected:** 23-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Mr. Liu Yang		
<b>Inspected CWI report:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A

<b>CWI Present:</b>	Yes	No
<b>Rod Oven in Use:</b>	Yes	No N/A
<b>Weld Procedures Followed:</b>	Yes	No N/A
<b>Verified Joint Fit-up:</b>	Yes	No N/A
<b>Approved WPS:</b>	Yes	No N/A
<b>Delayed / Cancelled:</b>	Yes	No N/A
<b>Component:</b>	OBG	

**Bridge No:** 34-0006**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector,Baskar Govindarajan, was present during the times noted above for observations relative to the work being performed.

Bay #14

This QA Inspector observed the following work in progress

Orthotropic Box Girder (OBG)

Flux cored Arc welding (FCAW)

Weld joint # 031, 033 located on Longitudinal Diaphragm to Floor beam FB3320, SEG 3020R in segment 14W. Welder is identified as 067520/ 058245. ZPMC Quality Control (QC) Inspector is identified as Zhu Lin. The welding variables recorded by QC appeared to comply with the WPS – B –T -2233-Esab.

Weld joint # 044 located on Hinge plate to Longitudinal diaphragm SEG 3020E in segment 14 W, P.P 128.3 . Welder is identified as 201215. ZPMC Quality Control (QC) Inspector is identified as Zhu Lin. The welding variables recorded by QC appeared to comply with the WPS – B –T -2233-Esab.

Weld joint # 035 located on Hinge plate to Longitudinal diaphragm SEG 3020D in segment 14 W, P.P 128.3 . Welder is identified as 045175. ZPMC Quality Control (QC) Inspector is identified as Zhu Lin. The welding

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

variables recorded by QC appeared to comply with the WPS – B –T -2233-Esab.

Weld joint # 058 located on Longitudinal Diaphragm to Floor beam FB3020, SEG 3020Q in segment 14W. Welder is identified as 067876. ZPMC Quality Control (QC) Inspector is identified as Zhu Lin. The welding variables recorded by QC appeared to comply with the WPS – B –T -2233-Esab.

### Shielded Metal Arc Welding (SMAW)

Repair welding of Weld joint # 005 as per WRR no. B –WR -19237 located on LD to Floor beam stiffener SEG 3013L. Welder is identified as 06163. ZPMC Quality Control (QC) Inspector is identified as Liu Fang. The welding variables recorded by QC appeared to comply with the WPS – 345 –SMAW -3G (3F) -FCM – Repair.

Repair welding of Weld joint # 114 as per WR no. B –WR -18765, located on Deck panel DP 3150 -001 in segment 13CW. Welder is identified as 067707. ZPMC Quality Control (QC) Inspector is identified as Shao Jan Yuan. The welding variables recorded by QC appeared to comply with the WPS – 345 –SMAW -2G (2F) -FCM – Repair.

Repair welding of Weld joint # 041 as per CWR no. B –CWR -2452, located on Deck panel DP 3152 -001 in segment 13CW. Welder is identified as 066398. ZPMC Quality Control (QC) Inspector is identified as Shao Jan Yuan. The welding variables recorded by QC appeared to comply with the WPS – 345 –SMAW -2G (2F) -FCM – Repair.

### Ultrasonic Testing (UT)

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 07897

This QA inspector performed UT of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report (TL 6027) for this date. The member is identified as OBG Anchor plates at Bay #14. The weld designation reviewed as follows:

AP3031-001 – Jt. nos - 285, 289, 293, 301, 305, 309, 315, 319, 333, 339, 343, 349, 355, 361, 365, 381, 387, 393, 399, 403

AP3031-001- Jt. nos -597, 603, 607, 623, 627, 633, 639, 643, 649, 655, 671, 677, 683, 687, 693, 699, 701, 717, 721, 725

AP3031-001- Jt. nos - 869, 873, 879, 885, 903, 909, 913, 917, 921, 925, 933, 949

For further information see below pictures:-

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



### Summary of Conversations:

No relevant Conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Thomas Hu (15002048250), who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Baskar, Govindarajan	Quality Assurance Inspector
----------------------	----------------------	-----------------------------

---

<b>Reviewed By:</b>	Clifford, William	QA Reviewer
---------------------	-------------------	-------------